

SOV/32-25-4-55/71

Simplifying the Shape of Samples for Testing Metals for Fatigue

passes - 2, roller pressure 60 kg. The tests showed that an increase in the surface hardness of the duralumin samples by rolling hardly depends on the number of passes and the roller pressure, and amounts to 30-35%. The test results confirm the assumptions by Kudryavtsev (Ref 2) on the applicability of simplified samples which are submitted to a surface hardening. On the other hand, rolling conditions are different for different metals and should be especially established by experiments. There are 2 Soviet references.

ASSOCIATION: Kiyevskiy institut grazhdanskogo vozdušnogo flota (Kiyev Institute of the Civil Air Fleet)

Card 2/2

SOLOGUB, Nikolay Avramovich, inzh.; IL'IN, Boris Nikolayevich, kand.  
tekhn. nauk, dotsent; IPATOV, Konstantin Aleksandrovich, inzh.;  
MOYSIK, M.R., kand. tekhn. nauk, retsenzent; TIRANSKAYA, S.M.,  
kand. tekhn. nauk, retsenzent; KHMELEVSKIY, S.A., kand. tekhn.  
nauk, retsenzent; PREYS, G.A., kand. tekhn. nauk, dots., red.;  
FURER, P.Ya., red.; GORNOSTAYPOL'SKAYA, M.S., tekhn. red.

[Laboratory research on the technology of metals] Laborator-  
nye raboty po tekhnologii metallov. Moskva, Mashgiz, 1961. 294 p.  
(Metallurgical research) (Metalwork—Testing) (MIRA 15:2)

SHAUL'SKIY, F.I., prof., doktor tekhn.nauk; LIVSHITS, R.M., kand.tekhn.  
nauk; SOLOGUB, N.K., kand.tekhn.nauk

Calculation of work volume and expenses in lengthening of  
station tracks. Zhel.dor.transp. 41 no.11:52-54 N '59.  
(MIRA 13:2)

(Railroads--Cost of construction)

... .., N.K., ... .., ... ..

Investigating the standing time of local cars waiting for transfer  
from classification to reight yards. Trudy MIT no.127:109-131 '61.  
(MIRA 18:3)

SOLOGUB, N.K., kand.tekhn.nauk, dotsent

Interaction of railroads and urban transportation systems in freight  
transportation. Trudy MIIT no.143:134-153 '62. (MIRA 15:7)  
(Transportation, Automotive --Freight)  
(Railroads--Freight)

SHAUL'SKIY, F.I., prof., doktor tekhn. nauk; SOLOGUB, N.K., kand. tekhn. nauk

Combination of suburban and city passenger transportation in large  
junction stations. Zhel. dor. transp. 47 no.9:44-47 S '65. (MIRA 18:9)

KOFMILITSYN, A.Ya., kand.tekhn.nauk; SOLOGUB, N.K., kand.tekhn.nauk

Make efficient use of mechanisms and automatic machinery in  
Moscow railroad stations. Zhel.dor.transp. 47 no.12:20-24  
D '65. (MIRA 18:12)

I. Vneshtatnyye inspektora Komiteta partiyno-gosudarstvennogo  
kontrolya Moskovskogo gorodskogo komiteta Kommunisticheskoy  
partii Sovetskogo Soyuza i Moskovskogo gorodskogo Soveta  
deputatov trudyashenikhsya.

SOLOGUB, N.M.

Some peculiarities of the higher nervous activity in patients with  
traumatic epilepsy. Fiziol.zhur. [Ukr.] 2 no.6:18-27 N-D '56.  
(MLRA 10:2)

1. Institut fiziologii imeni O.O.Bogomol'tsya Akademii nauk URSR,  
laboratoriya vishchoi nervovoi diyal'nosti.  
(EPILEPSY) (NERVOUS SYSTEM--DISEASES)

SOLOCHUB, N.M. [SOLOCHUB, N.M.]

Changes in the higher nervous activity in traumatic epilepsy.  
[with summary in English]. Fiziol.zhur. [Ukr.] 4 no.3:318-324  
My-Je '58 (MIRA 11:7)

1. Kiivs'kiy medichniy institut im. akademika O.O. Bogomol'tsya,  
Kafedra psikhatrii i Institut fiziologii im. O.O. Bogomol'tsya  
AN URSR, d viddil vishchoi nervovoi diyal'nosti.  
(EPILEPSY)  
(NERVOUS SYSTEM)

SOLOGUB, N. M., CAND MED SCI, "INTERRELATIONS OF THE PRO-  
CESSES OF CORTICAL STIMULATION, INHIBITION, AND EXHAUSTION IN  
THE INTERPAROXYSMAL <sup>period</sup> ~~STAGE~~ IN TRAUMATIC EPILEPSY." KHAR'KOV  
1961. (KHAR'KOV MED INST). (KL-DV, 11-61, 230).

SOLOGUB, N.M. [Solohub, N.M.]

Effect of convulsive attacks on the extinction of conditioned reflexes with and without reinforcement. Fiziol.zhur.[Ukr.] 9 no.1:120-123 Jan-F '63. (MIRA 18:5)

1. laboratoriya vysshey nervnoy deyatel'nosti cheloveka i zhivotnykh Instituta fiziologii im. Bogomo'l'tsa AN UkrSSR, Kiyev.

SOLOGUB, N.M. [Solohub, N.M.]

Some properties of lipolytic serum. Fiziol. zhur. [Ukr.] 9  
no.5:684-686 S-0'63 (MIRA 17:4)

1. Institut fiziologii imeni Bogomol'tsa AN UkrSSR, Kiyev.

SOLOGUB, N.M. *[Handwritten signature]*

Antifat serum, its properties and use. Fiziol.zhur. [Ukr.] 11  
no.4:520-525 J1-Ag '65. (MIRA 18-10)

1. Institut fiziologii im. A.A.Bogemol'tsa AN UkrSSR, Kiyev.

32348 SCIGOR, P. YA. AND NOVITSKIY, S. T.

Karen' zheludka. Vestnik khirurgii im. Grekova, 1949, No 5, s. 54-55

Sologub P. Ya.

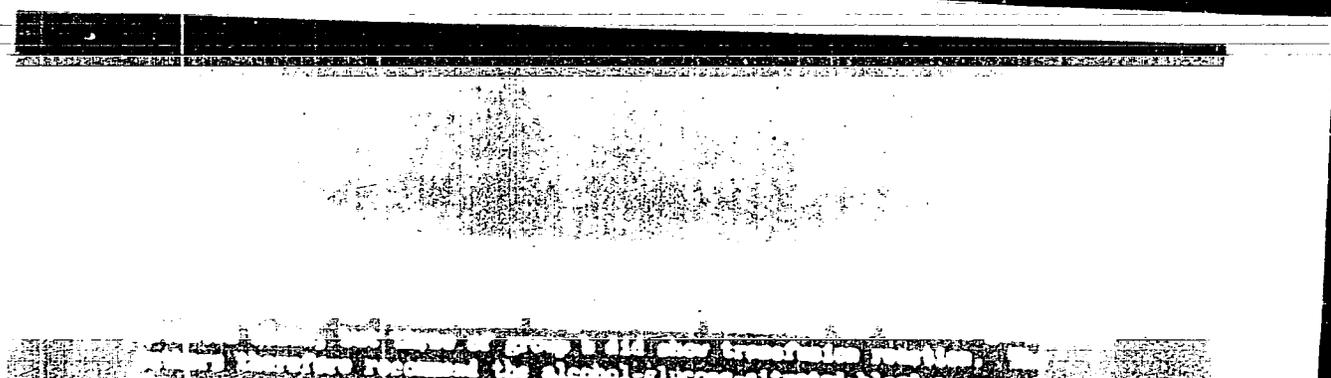
2

SAVITS, V. Ya., LEVCHUK, G. A., SOLOGUB, P. Ya., and ZEKHOVA, Z. D.

... blood in therapy of ...  
 ... G. A. Levchuk, P. Ya. Sologub, and ...  
 ... Scientific Research Institute ...  
 ... 10, Oct. 26, 1957 ...  
 ... single oral ...  
 ... were classified into three groups ...  
 ... (a) those not treated, (b) those treated by ...  
 ... alcohol-glucose-citrate blood ...  
 ... first 5 days ...  
 ... 12 days ... of the ten control rabbits ...  
 ... resistance and the survival by the

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220007-6



APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R001652220007-6"

PEYSAKHOVICH, I.M., prof.; SOLOGUB, P.Ya., kand.med.nauk; PROTSENKO, L.D.,  
kand.khim.nauk (Kiyev)

Action of N-benzoyl-N',N',N"-diethylene phosphoric triamide in in-  
hibiting tumor growth. Vrach.delo no.1:1249-1254 D '58.

(MIRA 12:3)

1. Ukrainskiy nauchno-issledovatel'skiy sanitarno-khimicheskiy insti-  
tut.

(CYTOTOXIC DRUGS)  
(PHOSPHORIC TRIAMIDE)

PEYSAKHOVICH, I.M., professor; SOLOGUB, P.Ya.; TELENGATOR, Ya.M. (Kiyev)

Influence of thio compounds on the antitumor action of some  
ethylenimine's. Pat. fiziol. i eksp. terap. 4 no.3:43-46 My-Je  
'60. (MIRA 13:7)

1. Iz Ukrainського sanitarno-khimicheskogo instituta (dir. - prof.  
N.I. Luganskiy).  
(CYTOTOXIC DRUGS) (THIOLS)

SOLOCUB, P.Ya., kand.med.nauk; LEVCHUK, G.A., kand.med.nauk (Kiyev)

Symposium of oncologists and chemotherapeutists. Vrach. delo no.11:  
152-154 N '61. (MIRA 14:11)

(MEDICINE--CONGRESSES)

LEDANOV, S.N., red.; SOLOGUB, P.Ya., red.; LEVCHUK, A.Ye., tekhn.  
red.

[Problems in the early diagnosis of acute radiation sickness]  
K voprosam rannei diagnostiki ostroi luchevoi bolezni; sbornik nauchnykh rabot. Pod red. S.N.Ledanova. Kiev, Gos.med. izd-vo USSR, 1962. 231 p. (MIRA 16:5)

1. Kharkov. Institut meditsinskoy radiologii.  
(RADIATION SICKNESS)

L 17561-63 EWT(1)/EWT(m)/BDS/ES(j) AMD/AFFTC/ASD AR/K  
ACCESSION NR: AT3002364 S/2930/62/000/000/0062/007? 58

AUTHOR: Peysakhovich, I. M. (Kiev); Telengator, Ya. M. (Kiev); Sologub, P. Ya. (Kiev)

TITLE: Dynamics of histochemical and morphological changes in animal internal organs shortly after total X-irradiation 19

SOURCE: K voprosam ranney diagnostiki ostroy luchevoy bolezni; sbornik nauchnykh rabot. Kiev, Medgiz USSR, 1962, 62-77

TOPIC TAGS: cytochemical changes, morphological changes, internal organs, X-irradiation, nucleic acids, alkaline phosphatase activity, sulfhydryl groups, liver glycogen, ascorbic acid

ABSTRACT: Changes in nucleic acids, alkaline phosphatase activity, sulfhydryl groups, liver glycogen, and ascorbic acid were investigated shortly after single dose irradiation and compared with the structural changes taking place in the organism. White rats were exposed to single total doses of 2,000, 1,000, 500 and 200 r. Then the spleen, liver, small intestine, and adrenal glands were tested by histochemical methods (of Fel'gen, Brashe-Beyker, Gomori, Zhiru and Leblon, Shevremon and Frederick, and Bauer) and other methods.

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L 17561-63

ACCESSION NR: AT3002364

Results show that 10 to 30 min after large doses of X-irradiation cytochemical and structural changes take place in the form of disturbed nucleoproteid contents in the spleen and in the mucosa of the small intestine. A similar process takes place in the radioresistant organs (liver) but less intensely. Decreases in DNA and RNA content in the spleen and in the small intestine mucosa are also observed for small doses (500 r), but they start much later and proceed more slowly reaching their lowest limit on the third day. For large irradiation doses phosphatase activity is characterized by two change phases: the growth phase and the decrease phase replacing it. Alkaline phosphatase activity increases shortly after irradiation reaching its highest point after 3 hrs. The histochemical increase in alkaline phosphatase activity precedes or accompanies the destructive changes in the karyoplasm and cytoplasm of the parenchymatous elements of the spleen, liver, and small intestine mucosa. Shortly after large doses of irradiation ascorbic acid in the adrenal glands quickly disappears and there is a decrease in the sulfhydryl groups in the liver and the spleen, but the glycogen content in the liver cells changes very little. The varied cytochemical and structural disturbances appearing shortly after irradiation indicate that the action of X-rays initiates

Card 2/B

I. 17561-63

ACCESSION NR: AT3002364

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numerous pathological processes which greatly weaken the organism's reactivity and lead to radiation sickness. Orig. art. has: 18 figures.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 28May63

ENCL: 00

SUB CODE: AM

NO REF SOV: 004

OTHER: 002

Card 3/3

SHAPIRO, V. S., prof. med.; MUKHOMOROV, I. I., prof. med.; KALININ, I. I., prof. med.; KALININ, E. A., prof. med.; KALININ, I. S., prof. med.; YAKOVLEV, Ya. V., prof. med.; YAKOVLEV, Ye. I., prof. med.; CHEPNEV, I. V., red.; KALININ, I. Ya., red.

[Physiology and pathology of connective tissues] Fiziologiya i patologiya svedeniya i meditsiny. Kiev, Zdorov'ya. 1964. 251 p. (MIRA 1964)

1. Kiev. Meditsynnyy instytut.

GOYKHEBERG, Moisey Iosifovich; SOLOVYOV, F.Ya., red.

[Surgical and radio therapy of cancer of the penis]  
Khirurgicheskoe i luchevoe lechenie raka polovogo chlena.  
Kiev, Zdorov'ia, 1965. 126 p. (MIRA 18:9)

PODIL'CHAK, Mikhail Dmitriyevich, prof.; SOLOGUB, P.Ya., red.

[Chronic inflammation and the growth of tumors] Khronicheskoe vospalenie i opukholevyi rost. Kiev, Zdorov'ia, 1965.  
178 p. (MIRA 18:9)



LEVIN, S.L., prof., doktor tekhn.nauk; KONOVALOV, V.S., inzh.; CHERNENKO,  
F.A., inzh.; KUZNETSOV, M.P., inzh.; SOLOGUB, S.L., inzh.

Some problems of smelting and pouring rimmed chromium steel.  
Izv.vys.ucheb.zav.; chern.met. no.10:15-22 O '58.

(MIRA 11:12)

1. Dnepropetrovskiy metallurgicheskiy institut i metallurgicheskiy  
zavod imeni Dzerzhinskogo.

(Chromium steel--Metallurgy)

AUTHORS: Derfel', A.G., Dubina, Yu.G., Kotin, A.G., Myshonkov, N.I.,  
Sologub, S.L., Tret'yakov, Ye.V., Khmirov, V.I.,  
Chernenko, F.A. and Shneyerov, Ya.A. <sup>SOV/133-59-5-6/31</sup>

TITLE: Efficiency of the Use of Sinter and Briquettes Instead of  
Ore and Limestone in Open-hearth Furnaces (Effektivnost'  
primeneniya v martenovskikh pechakh aglomerata i briketov  
vzamen rudy i izvestnyaka)

PERIODICAL: Stal', 1959, Nr 5, pp 400 - 407 (USSR)

ABSTRACT: In order to compare the efficiency of using fluxed sinter  
and ore-lime briquettes instead of ore and limestone in  
open-hearth furnaces as well as to determine the optimum  
composition of the above agglomerated materials, experi-  
mental heats were carried out in 370-ton open-hearth  
furnaces at the imeni Dzerzhinskiy Works during 1957-1958 .  
Altogether 63 heats with briquettes, 70 with sinters of  
various compositions and 90 comparative heats using ore  
and limestone were made. All heats were made in the  
same furnaces and during the same periods. The composition  
of briquettes and sinters tested is given in Table 1  
(basicity of briquettes varied from 0 - 5.4 and of

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SOV/153-59-5-6/31

## Efficiency of the Use of Sinter and Briquettes Instead of Ore and Limestone in Open-hearth Furnaces

sinters from 0.4 to 2.2). Changes in the basicity and FeO content in slag in the course of smelting are shown in Figures 1 and 2, respectively, the main indices of the experimental and comparative heats in Table 2, the comparison of the amounts of CaO, SiO<sub>2</sub> and  $\Sigma$ FeO transferred to slag from various granular materials - Table 3, changes in the SiO<sub>2</sub> content of slag in the course of smelting for various heats - Figures 3 and 8, the same changes in slag basicity - Figure 4, the same changes in the P<sub>2</sub>O<sub>5</sub> content - Figures 5 and 9, the same changes in the CaO content - Figure 6, the same changes in the  $\Sigma$ FeO and CaO and  $\Sigma$ FeO contents - Figures 7 and 11, the same changes in the content of sulphur - Figure 10. It was found that the use of fluxed briquettes or sinters instead of ore and limestone leads to a considerably faster formation of slag during the melting down period, to an earlier slag removal and to a corresponding decrease in the melting

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SOV/153-59-5-6/31  
Efficiency of the Use of Sinter and Briquettes Instead of Ore and Limestone in Open-hearth Furnaces

period. The use of fluxed briquettes or sinter of a basicity 2.0 - 2.5 without additions or with minimal additions of ore and limestone made it possible:

- 1) to decrease the melting period in 370-ton furnaces by 40-45 min with an increase in the furnace productivity of 6-7%;
- 2) to decrease the duration of heating up successive layers of granular materials during the charging period as well as their heating after the charging is completed (which permitted a further decrease of 10-15 min in the duration of heats);
- 3) to increase slag basicity in the course of smelting and to decrease the FeO content of slag at the beginning of the melting period and to increase its FeO content at the end of this period;
- 4) to increase the dephosphorising and desulphurising ability of slag due to its earlier formation and higher basicity throughout the whole course of smelting and
- 5) to exclude blow-outs from the furnace during melting.

The briquettes and sinters can also be used with success during refining. The organisation of a large-scale

Card 3/4

SOV/155-59-5-6/31  
Efficiency of the Use of Sinter and Briquettes Instead of Ore and  
Limestone in Open-hearth Furnaces

production of fluxed briquettes and sinters for the open-  
hearth furnaces and their wide application in steel-making  
practice is recommended. There are 11 figures, 3 tables  
and 6 Soviet references.

ASSOCIATIONS: Ukrainskiy institut metallov (Ukrainian Institute of  
Metals) and Zavod imeni Dzerzhinskogo (imeni Dzerzhinskiy  
Works)

Card 4/4

LEVIN, S.L.; YANKELEVICH, Ya.F.; SOLOGUB, S.L.; IUBINA, Ya.M.

Preparation of chemically capped steel. Izv. vys. ucheb. zav.;  
chern. met. 7 no.8:44-49 '64. (MIRA 17:9)

1. Inepetrovskiy metallurgicheskiy institut.

KUTSENKO, A.D., dotsent; REKHLIS, G.N., inzh.; SOLOGUB, S.L., inzh.;  
KARPUNIN, A.M., inzh.

Effect of the ingot mold design on the quality of Bessemer  
steel railroad rails. Stal' 24 no.5:420-423 My '64.  
(MIRA 17:12)

1. Dneprovskiy metallurgicheskiy zavod im. Dzerzhinskogo.

~~SOLOVUB~~, S.V., inzh.

Operational system of condenser electric motors. Vest. TSNII  
MPS 17 no.6:20-22 S '58. (MIRA 11:11)

1. Defektoskopnaya laboratoriya sluzhby putei Odesskoy zheleznoy  
dorogi.

(Electric motors, Induction)

SPIDAN P. S.V.

Magnetizing of the permanent magnets of defectoscopes. Part 1  
pat. Khoz. d no.10:30-31 '64. (MIRA 17:12)

1. Mashinisticheskaya defektoskopnaya laboratoriya sluzhby partii, Odessa.

SOLOGUB, S.V., inzh. (Odessa)

Operation of a three-phase asynchronous motor fed by a single-phase  
a.c. network. Put' i put.khoz. 4 no.6:35-37 Je '60.

(MIRA 13:7)

(Electric motors, Induction)

(Phase converters)

SABOVSKIY, Akin Samoy [redacted]. Prinsipal uchastiye SOLOGUB, S.V.;  
FRIDMAN, S.L.; KUL'BATSKIY, K.Ye., otv. red.; VOLODARSKAYA, V.Ye., red.

[Textbook on the theory of electrical communication]  
Zadachnik po teorii elektricheskoi sviazi. Izd.2., pe-  
rer. Moskva, Sviaz'izdat, 1963. 345 p.

(MIRA 17:7)

VERESKUNOV, G.P., kand.tokhn.nauk; SOLOVUB, S.Ya., gornyy inzh.

Electric rotary drilling of boreholes and other holes in hard  
rock. Gor. zhur. no.1:44-47 Ja '64. (MIRA 17:3)

2134. Sologub, V.A.

Organizatsiya Nadzora Za Merami I Izmeritel 'Nymn Priborami. Opyt Staro-  
Kramatorskogo Mashinostroit. Zavoda IM. Ordzhonikidze. Kiev, Mashgiz, UKR.  
Otd-Nie, 1954. 28s. 20sm. 4.000 EKZ 75k.-  
(54-56534)p 681.2.089.6-389.1(47)

SOLGUB, V.A. [Solohub, V.A.]

Relationship between the physical state of surface layers of  
disk knives and the conditions of machining. Dop. AN URSSR  
no. 153-57 '62. (MIRA 15:2)

1. Starokramatorskiy mashinostroitel'nyy zavod. Predstavleno  
akademikom AN USSR F.P. Belyankinym [Bieliankin, F.P.].  
(Metal-cutting tools)

DRAYGOR, D.A., doktor tekhn. nauk; SOLOGUB, V.A., inzh.; BELKIN, M.Ya.,  
inzh.; DUNAYEVSKIY, V.I., inzh.

Strength of ball-burnished circular. Mashinostroenie no.5:  
45-46 S-0 '63. (MIRA 16:12)

SOLOGUB, V.A., inzh.

Wear resistance of cutting disks and its connection with the  
technology of their manufacture. Stal' 23 no.6:561-562 Je  
'63. (MIRA 16:10)

1. Staro-Kramatorskiy mashinostroitel'nyy zavod.

DRAYGOR, D.A., doktor tekhn. nauk [deceased]; SOLOGUB, V.A.; DUNAYEVSKIY, V.I.

Effect of surface-active lubricating and cooling liquids on  
the durability of the blades of rotary shears. Met. i  
gornorud. prom. no.3:39-41 My-Je '64. (MIRA 17:10)

LUKASHEV, K.I., SOLOGUB, V.M.

Granulometric composition of the anthropogenic deposits of White  
Russian Polesye. Dokl. AN BSSR 7 no.3:178-185 Mr '63.

(MIRA 16:6)

1. Institut geologicheskikh nauk AN BSSR.  
(Polesye--Geology, Stratigraphic)

LUKASHEV, V.K.; SOLOGUB, V.M.

Accumulation of loess material in the depositions process of  
terminal moraine (as exemplified in the Mozyr' Hills). Dokl.  
AN BSSR 7 no.8:543-547 Ag '63. (MIRA 16:10)

1. Institut geologicheskikh nauk AN BSSR, Predstavleno  
akademikom AN BSSR K.I. Lukashevym.

SOLOGUB, V.S. [Solohub, V.S.]; BULDAKOV, A.M.

Film reinforcement on roll machines. Khim. prom. no.4:39-41  
O-D '64. (MIRA 18:3)

SOLOGUB, V., konstruktor

Motorcycles for rural regions made in Kiev. Za rul. 19 no.10:11  
O '61. (MIRA 14:11)

J. Neshtatnyy korr-spondent zhurnala "Za rulem".  
(Kiev--Motorcycle industry)

SOLOGUB, V.S.

Origin of the theory of potential of the double layer and its  
first applications in the solution of certain boundary value  
problems. Pribl. metod. resh. diff. urav. no.1:110-125 '63  
(MIRA 18:2)

SOLOGUB, V.S. [Solohub, V.S.]

Early methods of integration of Laplace's equation. Ist.-mat. zbir. 4:78-89 '63.

Sources of the first boundary value problem in the theory of potential and the method of Green's functions. Ist.-mat. zbir. 4:90-103 '63. (MIRA 17:3)

DOBROV, G.M. [Dobrov, H.M.]; SOLOGUB, V.S. [Solohub, V.S.]

In memory of D.A.Grave; a scientific conference. Dop. AN URSS  
no.5:697-699 '64. (MIRA 17:6)

L 23812-65 EWT(1)/EEC(b)-2/EWA(h) Feb

ACCESSION NR: AP5000841

8/0057/64/034/012/2160/2170

AUTHOR: Dutusov, M.M. / Smirnov, N.S. / Sologub, V.V. / Fridrikhov, S.A.

TITLE: Investigation of the properties of the space charge in a magnetron diode

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.12, 1964, 2160-2170

TOPIC TAGS: magnetron, space charge, microwave tube, noise spectrum, secondary emission

ABSTRACT: The tendency to self-oscillation, characteristic of space charge in magnetrons, is well known; some of the oscillation effects, however, are associated (by some authors) with the influence of the resonator system. Hence in the present work there were investigated the properties of the space charge in a magnetron diode, i.e., a system devoid of a cavity component. There were studied the oscillations generated by the space charge under different conditions of operation of the tube, the relative secondary emission of the cathode, and the intensity (power) of back bombardment of the cathode. In some ways the present study was an extension of the earlier comprehensive work of J.Yasuoka (Proc.Phys.Soc.Japan 10,1102,1955), D. Glass, G.Sims & A.G.Stainsby (Proc.IEE(B) 102,81,1955) and R.L.Jepson & M.W.Muller

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L 23812-65

ACCESSION NO: AP5000841

(J.Appl.Phys.22,1196,1951).. Some of the experimental measurements were performed on the equipment described by two of the authors earlier (M.M.Butusov and S.A.Fridrikhov,ZhTF 34,288,1964). A diagram of the main measurement setup is given in a figure, as is a sectional view of the magnetron diode. The results are presented in the form of curves and some reproductions of oscillograms. The principal conclusions are: 1. At appreciable plate voltages there is a magnetic field region in which the electrons returned to the cathode have considerable energies, which gives rise to secondary emission. 2. In the same region there is observed intense emission by the space charge of high-frequency noise at discrete frequencies; analysis of this noise radiation indicates that part of the space charge oscillations are of the rotary wave type. 3. The fraction of the power dissipated at the cathode by the back-bombardment electrons, referred to the input power, increases with the strength of the magnetic field (at a constant plate voltage). 4. The mechanism leading to intense energy exchange in the electron cloud at the magnetron diode is probably similar in many respects to secondary-electron resonance in crossed fields. "In conclusion, the authors express their gratitude to Prof.A.R.Shul'man for his attention to the work." Orig.art.has: 9 figures.

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L 23812-65

ACCESSION NR: AP5000841

ASSOCIATION: Leningradskiy politekhnicheskiy institut im.M.I.Kalinina (Leningrad  
Polytechnical Institute)

SUBMITTED: 12Dec63

ENCL: 00

SUB CODE: EC

NR REF SOV: 010

OTHER: 012

3/3

SOLOGUB, Ye.B. (Shtyurmer)

Trace processes in the respiratory center of warm-blooded animals.  
Fiziol.zhur. 45 no.9: 1067-1075 S '59. (MIRA 13:1)

1. Laboratoriya nervnoy sistemy Fiziologicheskogo instituta im.  
A.A. Ukhtomskogo pri Leningradskog gosudarstvennom universitete im.  
A.A. Zhdanova.  
(RESPIRATION physiol.)  
(CEREBRAL CORTEX physiol.)

SOLOGUB, Ye.B.

Peculiarities in the assimilation of the rhythm of stimulus by the respiratory center of mammals. Nerv. sist. no.1:123-133 '60.

(MIRA 13:9)

1. Laboratoriya fiziologii nervnoy sistemy, Leningradskiy ordena Lenina gosudarstvennyy universitet im. A.A. Zhdanova.

(RESPIRATORY ORGANS)

(ELECTROPHYSIOLOGY)

(NERVOUS SYSTEM)

SOLOGUB, Ye.B.

Changes with age in the functional state of the respiratory center  
in warm-blooded animals. Vest IGU 15 no.15:147-152 '60.

(MIRA 13:8)

(Respiration)

(Age)

SOLOGUB, Ye.B.

Changes in the human EEG under the influence of muscular exertion.  
Fiziol. Zhur. 46 no. 7:786-794 J1 '60. (MIRA 13:8)

1. From the P.F. Lesgaft Institute of Physical Culture and the  
Uchtomsky Physiological Institute of the University, Leningrad.  
(EXERCISE) (ELECTROENCEPHALOGRAPHY)

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834-842 JI '61. (MIRA 15:1)

1. Institut fizicheskoy kul'tury imeni P.F.Lesgafta i Fiziologichëskiy  
institut imeni A.A.Ukhtomskogo Gosudarstvennogo universiteta imeni  
A.A.Zhdanova, Leningrad. (ELECTROENCEPHALOGRAPHY)

SOLOGUB, Ye.B.

"Marked rhythms" in the pre-start electroencephalogram in man and the mechanisms of motor dynamic stereotype formation. Fiziol. zhur. 48 no.1:1-10 Ja '62. (MIRA 15:2)

1. From the Department of Physiology, P.F.Lesshaft Institute of Physical Culture, Leningrad.  
(ELECTROENCEPHALOGRAPHY)

SOLOGUB, Ye., kand.biolog.nauk; VERKHALO, Yu., inzh.

Man as generator of electricity. IUn.tekh. 7 no.4:33-36 Ap '63.  
(MIRA 16:4)

(Electrophysiology)

SOLOGIB, Ye.B.

Autocorrelation and cross-correlation analysis of "labelled rhythms"  
in the human EEG during muscular activity. Fiziol.zhur. 50 no.6:681-  
689 Je '64. (MIRA 18:2)

1. Kafedra fiziologii Instituta fizicheskoy kul'tury imeni  
Lesgafta, Leningrad.

SECTION, 7-1-1

intentional or accidental during the formation of a primary bond  
steroid, based on the data of cross-sectional analysis of human  
gonadotropin. This type of cross-section is no. 1130000, page 165.  
1. (continued) from the physical culture in 1.4. 1962/12.

SOLCGUB, Yu. L., Candidate Med Sci (diss) -- "The paranoid syndrome in schizophrenia (In the forensic-psychiatric clinic)". Moscow, 1959. 16 pp (Min Health USSR, Central Inst for the Advanced Training of Physicians), 200 copies (KL, No 22, 1959, 122)

SOLOVUB, Ya.L.

Delimitation of the paranoid syndrome in schizophrenia, of the pathological development of the personality, and of some forms of reactive conditions. Probl.sud.psikh. 8:500-516 '59.  
(MIRA 13:6)

(Mental illness--Diagnosis)

SOLOGUB, Yu.L.

Study of higher nervous activity in schizophrenic patients with  
a paranoid syndrome. Zhur. vys. nerv. deiat. 10 no. 3:395-400  
My-Je '60. (MIRA 14:2)

1. Serbsky Central Institute of Forensic Psychiatry, Moscow.  
(SCHIZOPHRENIA) (PARANOIA) (CONDITIONED RESPONSE)

SOLOGUBENKO, L.A.

Magnesia. B. A. Shorkher and L. A. Sologubenko.  
U.S.S.R. 104,202, Nov. 25, 1956. Magnesia thermo-in-  
sulating materials of the Nevel type are obtained by pptg.  
natural Mg sulfate solns. with slaked lime, thus obtaining a  
mixt. of  $Mg(OH)_2$  and  $CaSO_4$ , carbonating the gypsum-  
magnesia mixt. to obtain a sol. Mg bicarbonate, and trans-  
forming  $Mg(HCO_3)_2$  into basic Mg salts. To prevent the  
carbonation of gypsum and the formation of magnesia contg.  
insignificant quantities of Ca, the gypsum-magnesia mixt.  
prior to carbonation is calcined at around 600°.

M. Hirsch

2

Sologubenko, L. Ye.

15  
Magnesia refractories. B. A. Sholkhet and L. E. Sologubenko. U.S.S.R. 100,830, Aug. 25, 1957. Natural MgSO<sub>4</sub> solns. are treated with slaked lime to ppt. Mg(OH)<sub>2</sub> and CaSO<sub>4</sub>. The mixt. is then carbonated until a sol. Mg(HCO<sub>3</sub>)<sub>2</sub> is obtained; this is later converted into a basic Mg salt by heating. The carbonization of the gypsum-MgO mixt. is carried out in a soln. contg. 11.5% MgSO<sub>4</sub>.  
M. Hosh

3  
4E20

Jag

SOV/81-59-16-57773

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 16, p 300 (USSR)

AUTHORS: Shoykhet, B.A., Sologubenko, L.Ye.

TITLE: The Preparation of Magnesium Oxide Brine From the Brines of Sivash

PERIODICAL: V sb.: Kompleksn. ispol'zovaniye solyan. resursov Sivasha i Perekopsk. ozer. Kiyev, AN UkrSSR, 1958, pp 66-79

ABSTRACT: It has been established that the production of conditional  $Mg(OH)_2$  for refractories from the brine of the Perekop lakes and from Sivash de-sulfated brine is possible. Conditional  $Mg(OH)_2$  can be obtained by the treatment of the brine with limewater under the condition of complete burning of the lime. At the use of commercial 85%-lime the preparation of MgO suitable for refractories is possible by direct treatment of the brine with ground lime. A technological production method has been developed which has been tested in a pilot installation of the Krasno-perekop Plant, and a test sample of 15 tons MgO has been obtained which contained up to 1.5% CaO.

From the author's summary.

Card 1/1

SHOYKHET, B.A.; SOLOGUBENKO, L.Ye.; RUTKOVSKAYA, L.M.

Production of magnesium sulfate by carbonation of a saline brine  
of gypsum-magnesia concentrates. Ukr.khim.zhur. 29 no.6:651-658  
'63. (MIRA 16:9)

1. Gosudarstvennyy institut prikladnoy khimii.  
(Magnesium sulfate)

SHOYKHET, B.A.; KARASIK, E.M.; LYUTKEVICH, I.G.; SOLOGUBENKO, I.Ye.

Interaction of magnesium oxychloride and magnesia cements with  
borate-containing solutions. Ukr.khim.zhur. 30 no.11:1223-1227  
'64. (MIRA 18:2)

SHCHERET, M.A.; SOLOVYENKO, I.Ye.; KALASH, S.M.

Some regularities of the sorption of levated  $\text{CO}_2$  on  
magnesium oxide. Ukr.khim.zhur. 30 no.5:704-80 '84.

1984-10-07

1. Institut prikladnoy khimii, Yevpatoriya.

SOLOGUBOV, G.M. [Solohubov, H.M.]

Reestablish the central control system in repair and supply stations.  
Mekh.sil'.hosp. 9 no.11:11-12 N '58. (MIRA 11:12)

1. Direktor Cherkasskoy remontno-tekhnicheskoy stantsii.  
(Repair and supply stations)

SOLOGUBOV, L.M.;SVINAREV, V.I.

Rice cultivation and prospects for the development of rice growing  
in Astrakhan Province. Zemledelie 4 no.10:62-65 0 '56. (MLRA 9:11)

1. Astrakhanskaya gosudarstvennaya sel'skokhozyaystvennaya opyt'naya.  
(Astrakhan Province--Rice)

USSR/Cultivated Plants. Grains:

11

Abs Jour : Ref Zhur-Biol., No 15, 1956, 68134

Author : Sologubov, L. M., Svinarev, V. I.

Inst : Kuban' Rice Experiment Station.

Title : Rice Fertilization and Yields in the Volga-Akhtubinsk Bottom Lands and the Volga Delta.

Orig Pub : V sb.: Kratkiye itogi nauchno-issled. raboty (Kubansk. ris. opyt. st.) za 1956 g. Krasnodar, "Sov. Kuban'", 1957, 30-36

Abstract : Rice is the most productive grain for the irrigated conditions of the Volga-Akhtubinsk bottom lands. Problems of fertilization were investigated at the Astrakhan Agricultural Station. The specific physico-chemical and biological properties of the soil of the

Card : 1/2

SOLOGUB, V.A., kand. tekhn. nauk

Donets Basin products should be on the level of the best standards in the world. Standartizatsiya 29 no.9:58-59 S '65. (MIRA 18:12)

1. Sekretar' Donetskogo oblastnogo komiteta Kommunisticheskoy partii Ukrainy.

ACC NR: AR7000894 SOURCE CODE: UR/0058/66/000/009/H035/H035

AUTHOR: Marchenko, V. A.; Sologub, V. G.

TITLE: Excitation of a circular waveguide by a dipole

SOURCE: Ref. zh. Fizika, Abs. 9Zh253

REF SOURCE: Radiotekhnika. Resp. mezhved. nauchno-tekhn. sb., vyp. 1, 1965, 3-13

TOPIC TAGS: circular waveguide, dipole moment, dipole, magnetic dipole, dipole excitation

ABSTRACT: A study has been made on the excitation of a circular waveguide by electric and magnetic dipoles with individual moments aligned with the waveguide axis. The dipole field in the presence of the waveguide is determined proceeding from expressions for this field in a free space field by using the Hertz vectoring device. The latter is broken into two components, the first one representing an undisturbed field and the other one showing the perturbations caused by the presence of periodic systems emanating from the infinitely thin ideally-conductive

Card 1/2

ACC NR: AR7000894

rings. Both components are expressed in Fourier integrals as Henkel's functions of the first type, zero order. The periodic function describing the perturbation of the field is expanded into the Fourier series by using Bessel and Henkel's functions inside and outside the waveguide, respectively. When applying boundary conditions and using the relationship between Bessel's and Henkel's functions, two infinite systems of linear algebraic equations result with regard to the coefficient of expansion. An approximate solution of the system obtained may be found by the successive-approximation method. The solution to the first approximation is obtained under the condition that  $kl/\pi < 1$ , where  $k$  is the propagation constant in free space, and  $l$  is the structural period. The limiting terms for the field vectors have been defined with  $l \rightarrow 0$  from which the decrease in field amplitude with  $|z| \rightarrow \infty$  is investigated, where  $z$  is the longitudinal axis of the waveguide. The results obtained here agree with those of earlier research (TZhFiz, 1959, No. 2, 3932). [Translation of abstract]. [KP]

SUB CODE: 20/

Card 2/2

DROMASHKO, S.G.; LUKASHEV, K.I.; MATVEYEV, A.I.; SOLOGUB, V.M.

Mineralogical subprovinces of Quaternary sediments in the  
White Russian Polesye. Dokl. AN BSSR 9 no.10:675-679 0  
'65. (MIRA 18:12)

1. Laboratoriya geokhimicheskikh problem AN BSSR. Submitted  
September 29, 1965.

SOLOGUBOV, V. N.

**Author:** Sologubov, V. N.

**Title:** The steam engine thermotechnique. (Parovoznaia teplotekhnika.) 125 p.

**City:** Moscow

**Publisher:**

**Publication:** State Printing House of Literature on Railroad Transportation.

**Date:** 1946

**Available:** Library of Congress

**Source:** Monthly List of Russian Accessions, Vol. 3, No. 1, Page 20

SOLOGUEOV, V. N.

Ustroistvo uzkokoleinykh parovozov tipov 157 i 159. Izd. 2., ispr. i dopoln. Moskva, Transzheldorizdat, 1946. 202 p. illus.

(Working principles of the 157 and 159 type narrow-gauge locomotives.)

DLC: TJ635.S6 1946

SO: Manufacturing and Mechanical Engineering in the Soviet Union,  
Library of Congress, 1953

SOLOGUBOV, V. N.

Organizatsiia parovoznogo khoziaistva. Utverzhdeno v kachestve uchebnika dlia unchashchikhsia tekhnikumov zhel-dor. transporta. (Redaktory: V. G. Merezko, V. A. Drobinskii) Moskva, Transzheldorizdat, 1950. 318 p. diags.

(Organization of the locomotive economy.)

DLC: TF85.S56

SO: Manufacturing and Mechanical Engineering in the Soviet Union,  
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СОЛОГУБОВ, В. Н.

USSR/Engineering - Heat, Steam Engines Aug 51.

"Investigation of the Thermodynamic Process of a Steam Engine for Narrow-Gauge Locomotive on the Basis of Similarity Theory," V. N. Sologrubov

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 8, pp 1198-1201

Analyzes testing results and concludes that steam engines of narrow-gauge and normal-gauge locomotives are geometrically similar and criteria relationships are identical for all locomotives. This conclusion permits use of regularities for normal-gauge locomotives in designing and modernization of narrow-gauge locomotives, and creates... 205T20

USSR/Engineering - Heat, Steam Engines Aug 51 (Contd)

possibility for studying thermodynamic process of steam engines on models. Submitted by Acad M. V. Kirpichev 12 Dec 50.

205T20

SOLOGUBOV, V. N.

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USSR/Engineering - Thermal Engineering 11 Jun 51

"Investigation of the Thermodynamic Process in a Steam Engine of a Narrow-Gauge Locomotive on the Basis of the Theory of Similarity," Acad M. V. Kirpichev, V. N. Sologubov

"Dok Ak Nauk SSSR" Vol LXXVIII, No 5, pp 893, 894

Interpretation of results of tests related to narrow-gauge locomotives of types 157 and PT-4 permits conclusion their engines are similar to those of standard gauge locomotives and relations among criteria for both types of locomotives are identical. Creates possibility for studying thermodynamic process of

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USSR/Engineering - Thermal Engineer- 11 Jun 51  
ing (Contd)

steam engines or models under lab conditions with min expense.

184144

BARANOV, A.F., redaktor; BIZYUKIN, D.D., redaktor; VAKHNIN, M.I., otvetstvennyy redaktor toma, professor, doktor tekhnicheskikh nauk; VEDEMISOV, B.N., redaktor; IVLIYEV, I.V., redaktor; MOSHCHUK, I.D., redaktor; RUDOY, Ye.F., glavnyy redaktor; SOKOLINSKIY, Ya.I., redaktor; SOLOGUBOV, V.N., redaktor; SHILEVSKIY, V.A., redaktor; ALFEROV, A.A., inzhener; ~~SHASTIN~~ B.T., inzhener; AFANAS'YEV, Ye.V., laureat Stalinskoy premii, inzhener; BELENKO, K.M., dotsent; BORISOV, D.P., dotsent, kandidat tekhnicheskikh nauk; ZHIL'TSOV, P.N., inzhener; ZBAR, N.R., inzhener; IL'YENKOV, V.I., dotsent, kandidat tekhnicheskikh nauk; KAZAKOV, A.A., kandidat tekhnicheskikh nauk; KRAYZMER, L.P., kandidat tekhnicheskikh nauk; KOTLYARENKO, N.F., dotsent, kandidat tekhnicheskikh nauk; MAYSHEV, P.V., professor, kandidat tekhnicheskikh nauk; MARKOV, M.V., inzhener; NELEPETS, V.S., dotsent, kandidat tekhnicheskikh nauk; NOVIKOV, V.A., dotsent; ORLOV, N.A., inzhener; PETROV, I.I., kandidat tekhnicheskikh nauk; PIVKO, G.M., inzhener; POGDIN, A.M., inzhener; RAMLAU, P.N., dotsent, kandidat tekhnicheskikh nauk; ROGINSKIY, V.N., kandidat tekhnicheskikh nauk; RYAZANTSEV, B.S., laureat Stalinskoy premii, dotsent, kandidat tekhnicheskikh nauk; SNARSKIY, A.A., inzhener; FEL'DMAN, A.B., inzhener; SHASTIN, V.A., laureat Stalinskoy premii, inzhener; SHUR, B.I., inzhener; GONCHUKOV, V.I., inzhener, retsenzent; NOVIKOV, V.A., dotsent, retsenzent; AFANAS'YEV, Ye.V., laureat Stalinskoy premii, retsenzent;

[Technical handbook for railroad men] Tekhnicheskii spravochnik zheleznodorozhnika. Vol. 8. [Signaling, central control, block system, and communication] Signalizatsiya, tsentralizatsiya, blokirovka, svyaz'. Red. kollegiya A.F.Baranov [i dr.] Glav.red. E.F.Rudoi. Moskva, Gos. transp. zhel-dor. izd-vo, 1952. 975 p. (Continued on next card)

BRYLEYEV, A.M., laureat Stalinskoy premii, inzhener; GAMBURG, Ye.Yu., inzhener, retsenzent; GOLOVKIN, M.K., inzhener, retsenzent; KAZAKOV, A.A., kandidat tekhnicheskikh nauk, retsenzent; KUT'IN, I.M., dotsent, kandidat tekhnicheskikh nauk, retsenzent; LEONOV, A.A., inzhener, retsenzent; SEMENOV, N.M., laureat Stalinskoy premii, inzhener, retsenzent; CHERNYSHEV, V.B., inzhener, retsenzent; VALUYEV, G.A., inzhener, retsenzent; METTAS, N.A., laureat Stalinskoy premii, inzhener, retsenzent; NOVIKOV, V.A., dotsent, retsenzent; PIVOVAROV, A.L., inzhener, retsenzent; POGODIN, A.M., inzhener, retsenzent; KHODOROV, L.R., inzhener, retsenzent; PIVOVAROV, A.L., inzhener, retsenzent; POGODIN, A.M., inzhener, retsenzent; KHODOROV, L.R., inzhener, retsenzent; SHUPLOV, V.I., kandidat tekhnicheskikh nauk, retsenzent; KLYKOV, A.F., inzhener, retsenzent; YUDZON, D.M., tekhnicheskii redaktor; VERINA, G.P., tekhnicheskii redaktor.

[Technical handbook for railroad men] Tekhnicheskii spravochnik zheleznodorozhnika. Vol. 8. [Signaling, central control, block system, and communication] Signalizatsiia, tsentralizatsiia, blokirovka, sviaz'. Red. kollegiia A.F.Baranov [i dr.] Glav.red. E.F.Rudoi. Moskva, Gos. transp. zhel-dor. izd-vo, 1952. 975 p. (Card 2) (MLRA 8:2)  
(Railroads--Signaling) (Railroads--Communication systems)

SOLOGUBOV, V.N., dotsent, kandidat tekhnicheskikh nauk.

Thermodynamic processes in narrow-gage locomotives and the building  
up of their traction and heat engineering characteristics. Trudy MEMIIT  
no.62:5-34 '53. (MLRA 7:12)  
(Locomotives)

SOLOGUBOV, V.N., dotsent, kandidat tekhnicheskikh nauk.

Investigation of the operation of the conical exhaust system of  
narrow-gage locomotives. Trudy MEMIIT no.62:35-60 '53.(MLRA 7:12)  
(Locomotives--Exhaust)

SOLOGUBOV, Viktor Nikolayevich, professor; MUZHICHKOV, V.I., inzhener,  
redaktor; YUDZON, D.M., tekhnicheskiy redaktor

[Locomotive management] Organizatsiia parovoznogo khoziaistva.  
Izd. 2-e, perer. i dop. Moskva, Gos.transp.zhel-dor. Izd-vo,  
1955. 341 p. (MLRA 9:3)

(Locomotives)

BARANOV, A.F., redaktor; RUDOV, E.F., redaktor; SOLOGUBOV, V.N., kandidat  
tekhnikeskikh nauk, otvetstvennyy redaktor ~~to~~; ALBEGOV, N.A.,  
kandidat tekhnicheskikh nauk; VASIL'YEV, B.K., inzhener; VERSHINSKIY,  
S.V., kandidat tekhnicheskikh nauk; VINOGRADOV, G.P., kandidat tekhnicheskikh nauk; VINOKUROV, M.V., professor, doktor tekhnicheskikh nauk; GOLOVANDOV, V.G., kandidat tekhnicheskikh nauk; GORDNYEV, A.S., dotsent, kandidat tekhnicheskikh nauk; GURSKIY, P.A., dotsent, kandidat tekhnicheskikh nauk; GUREVICH, A.N., kandidat tekhnicheskikh nauk; DOMBROVSKIY, A.B., dotsent; YEGORCHENKO, V.F., professor, doktor tekhnicheskikh nauk; IVANOV, V.N., professor, doktor tekhnicheskikh nauk; KARVATSKIY, B.L., professor, doktor tekhnicheskikh nauk; KOROLEV, K.P., professor, doktor tekhnicheskikh nauk; MUCHKIN, I.N., kandidat tekhnicheskikh nauk; POPOV, G.V., inzhener; PROSKURNEV, P.G. inzhener; SAFON-TSEV, K.A., inzhener; SEICHASTNOV, I.F. dotsent, kandidat tekhnicheskikh nauk; SLOMYANSKIY, A.V., dotsent, kandidat tekhnicheskikh nauk; STEPANOV, A.D., dotsent, kandidat tekhnicheskikh nauk; SYROMYATNIKOV, S.P., akademik[deceased]; TERNOVSKIY, V.A., dotsent; kandidat tekhnicheskikh nauk; TRUBETSKOY, V.A., kandidat tekhnicheskikh nauk, KHOKHLOV, N.F., kandidat tekhnicheskikh nauk; SHARONIN, V.S., kandidat tekhnicheskikh nauk; SHLYKOV, Yu.P., dotsent, kandidat tekhnicheskikh nauk; YEVTUSHENKO, A.M., kandidat tekhnicheskikh nauk, retsenzent; IVANOV, V.N., professor, doktor tekhnicheskikh nauk, retsenzent; PANOV, N.I., dotsent, kandidat tekhnicheskikh nauk, retsenzent; SLOMYANSKIY, A.V., dotsent, kandidat tekhnicheskikh nauk, retsenzent; UTYANSKIY, L.I., inzhener, retsenzent; NETYKSA, V.M., professor, doktor tekhnicheskikh nauk, retsenzent;

(Continued on next card)

BARANOV, A.F., -- (Continued) Card 2.

TOPORNIN, G.S., inzhener, retsenzent; DOMBROVSKIY, A.B., dotsent; retsenzent; POYDO, A.A., kandidat tekhnicheskikh nauk, retsenzent; YAKOBSON, P.Ye., laureat Stalinskoy premii; dotsent; kandidat tekhnicheskikh nauk, retsenzent; POPOV, A.A., professor, doktor tekhnicheskikh nauk, retsenzent; PROSKURNEV, P.G., inzhener, retsenzent; SAFONTSEV, K.A., inzhener, retsenzent; SERAFIMOVICH, V.S., kandidat tekhnicheskikh nauk; retsenzent; TRAVIN, P.I., inzhener, retsenzent; FOKIN, K.F., kandidat tekhnicheskikh nauk, retsenzent; SHCHERBAKOV, V.P., inzhener, retsenzent; SHADUR, L.A., dotsent; kandidat tekhnicheskikh nauk, retsenzent; TIKHONOV, P.S., inzhener retsenzent; TKACHENKO, F.D., inzhener; retsenzent; BABICHKOV, A.M. professor, doktor tekhnicheskikh nauk, retsenzent; KOROSTYLEV, A.I. inzhener, retsenzent; LEVITSKIY, V.S., dotsent; kandidat tekhnicheskikh nauk, retsenzent; KLYKOV, A.F., inzhener, retsenzent; SOLOGUBOV, V.N. redaktor; SHISHKIN, K.A., redaktor; SLOMYANSKIY, A.V. redaktor; SALENKO, S.V., redaktor; YUDZON, D.M. tekhnicheskii redaktor.

[Technical reference book for railroad men] Tekhnicheskii spravochnik zheleznodorozhnika. Redaktsionnaya kollegiya: A. F. Baranov, i dr. Glav. redaktor. E. F. Rudoi. Moskva, Gos.transp.zhel-dor.izd-vo. Vol. 6 [Rolling stock] Podvizhnoi sostav. 1952. 955 p. (MLRA 8:9) (Railroads--Rolling-stock)

BOYKO, Fedor Ivanovich; SOLOGUBOV, V.H., doktor tekhnicheskoy nauk,  
retsensent; BLIZNYANSKIY, A.S., inzhener, redaktor; SOKOLOVA, T.F.,  
tekhnicheskoy redaktor

[Locomotives for industrial transportation] Parovozy promyshlennogo  
transporta. Izd.)-e, perer. i dop. Moskva, Gos.nauchno-tekhn.isd-vo  
mashinostroit. lit-ry, 1957. 262 p. (MLRA 10:7)  
(Locomotives)

PIVOVAROV, L.A.; SOLOGUBOV, V.N.

Concentration and composition of dust in the working air before entering the air filter of the diesel locomotive. Trudy  
MIT no.110:26-47 '59. (MIRA 13:4)  
(Diesel locomotives) (Air filters)

BUDNIKOV, P.P.; SOLOGUBOVA, O.M.

Reaction between kaolin and calcium carbonate and preparation of white  
cement. Doklady Akad. Nauk S.S.S.R. 85, 1127-30 '52. (MLRA 5:9)  
(Ca 47 no.19:10194 '53)

СЛУЖБОВИЙ Д. Д.

(2)

1254. Investigation of reactions between kaolin and calcium carbonate and the production of white cement.—P. P. BUDSIKOV and O. M. SOLOGUROVA (*Silikat Tech.*, 4, 503, 1953). It is possible to produce a white hydraulic cement from kaolin and chalk with an addition of 10% gypsum as a mineralizer. The latter promotes the formation of  $2\text{CaO}\cdot\text{SiO}_2$  and  $\text{CaO}\cdot\text{Al}_2\text{O}_3$  and improves the hydraulic properties. The whiteness of this cement reaches 87%; density is 2.471; crushing-strength, 5,000–5,700 lb./sq.in.; tensile strength, 455 lb./sq.in. (6 figs., 9 tables.)

SOLOGUBOVA, O.M.

Chemical Abst.  
Vol. 48  
Apr. 10, 1954  
Cement, Concrete, and Other Building  
Materials

Reaction between kaolin and calcium carbonate in white-cement production. P. P. Rudnikoz and O. M. Sologubova (D. I. Mendeleev Inst. Chem. Technol., Moscow), *Ukrain. Khim. Zhur.* 19, No. 1, 92-101 (1953); *Silikateck.* 4, 603-5 (1953); cf. *C.A.* 47, 10194i. — A belitic aluminate cement is produced from a raw mix of kaolin (1 part), chalk (2 parts), and gypsum (10%) added as mineralizer, by burning at 1200° (as optimum). The clinker is milled with anhydrite, and the cement produced is characterized by its high mech. strength. The albedo of the cement is remarkably high, because of its low contamination by  $Fe_2O_3$  (less than 0.4%), namely 87%, with baryte as 100% albedo standard. The fundamental reactions in the raw mixes are illustrated by the differential thermal curves, and simple heating curves, which show endothermic effects of the kaolin dehydration, the decarbonation of the chalk, and the exothermic formation of  $CaO \cdot Al_2O_3$ , with a sharp peak above 1000°. In the same time,  $CaO$  and  $SiO_2$  react to form  $2CaO \cdot SiO_2$ . The reactions are also studied by measurements of the elec. cond. of the solid pellets. It is concluded that no liquid phases occur up to 1200°. The examn. of thin sections showed  $CaO \cdot Al_2O_3$  and  $2CaO \cdot SiO_2$  as typical clinker minerals, anorthite and gehlenite as (nonhydraulic) accessories. In the gypsum-contg. batches, no free  $CaO$  was observed above 1100° while the mixes without gypsum contained even at 1300° 0.3% free  $CaO$  and no  $3CaO \cdot Al_2O_3$ . The clinker powder, blended with 3%  $CaSO_4 \cdot \frac{1}{2}H_2O$ , or 5% anhydrite shows improved mech. strengths in the hydrated mortar samples. No detrimental ettringite is formed; the microscopic inspection of the hydration products showed only  $2CaO \cdot Al_2O_3 \cdot 7H_2O$  and  $2CaO \cdot SiO_2 \cdot nH_2O$ . The differential thermal analysis of mortars 28 days old shows a strong exothermic reaction at 200° to 710° and a second at 810° to 910°, which is interpreted as the formation of  $CaO \cdot Al_2O_3$  from  $2CaO \cdot Al_2O_3 \cdot 7H_2O$ . The dehydration of  $2CaO \cdot Al_2O_3 \cdot 7H_2O$  at 320° to 340° is endothermic. W. Eitel

FAN-YUNG, A.F.; SOLOD, M.Ye.

Development of objective methods for determining the clearness  
of clarified fruit juices. Kons. i ov.prom. 18 no.10:31-33 0  
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1. Odesskiy tekhnologicheskii institut pishchevoy i kholodil'noy  
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Using mathematical machines for obtaining optimum recipes of feed mixtures. Trudy Od. tekh. inst. 14:87-101 '62.

(MIRA 16:1E)

1. Rabota vypolnena na kafedre mekhanizatsii i avtomatizatsii proizvodstva Odesskogo tekhnologicheskogo instituta.  
Rukovoditel' raboty - doktor tekhn. nauk, prof. Platonov, P.N.

S/048/60/024/02/03/009  
B006/B014

24.2/30

AUTHORS: Sinyakov, Ye. V., Solok, A. M.

TITLE: Relaxation Polarization of the System  $SrTiO_{3-n}MnO_n$

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960, Vol. 24, No. 2, pp. 132 - 135

TEXT: The article under review was read at the Second All-Union Conference on the Physics of Dielectrics (Moscow, November 20 - 27, 1958). In continuation of the studies made by G. I. Skanavi and others concerning relaxation losses, the authors conducted relevant investigations on ceramic samples of  $SrTiO_{3-n}MnO_n$  of different compositions. This system was chosen in order to investigate the influence of manganese ions on the dielectric polarization of strontium titanate.  $MnCO_3$  is dissociated on heating the atmosphere in  $MnO$  and  $CO_2$ ; on further heating,  $MnO$  is oxidized to "kurnakite", hausmannite, and other oxides. Hence, the occurrence of relaxation polarization is to be expected in the presence of ions of trivalent manganese in  $SrTiO_3$ . The composition of the samples investigated is given in Table 1.  $\epsilon$  and  $\tan \delta$  were measured at 1.5 and 12 Mc/sec

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Relaxation Polarization of the System  $\text{SrTiO}_3 \cdot n\text{MnO}$ S/048/60/024/02/03/009  
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by using a Q-meter of the type KV-1 in a wide temperature range. Results are given in two diagrams and a further table. Fig. 1 shows the temperature dependence of  $\epsilon$  and  $\tan \delta$  on samples with  $97 \text{ SrTiO}_3 + 3 \text{ MnO}$  at different frequencies. The maximum of the temperature dependence on  $\epsilon$  is found to shift toward higher temperatures with rising frequency. The existence of this temperature maximum and its shift are indicative of a relaxation polarization in this system. To clarify the structure of these samples, an X-ray structural analysis was made, the results of which are discussed and given in Table 2. Fig. 2 shows the temperature dependence of  $\epsilon$  and  $\tan \delta$  in samples of the system  $\text{Bi}_2\text{O}_3 \cdot n\text{MnO}$  ( $n = 1, 2, 3$ ). In this system,  $\epsilon$  is very strongly dependent on temperature. Its values at three different temperatures are given in Table 3, as well as the values of  $\tan \delta$  for the compositions  $(100-n)\text{SrTiO}_3 + n(\text{Bi}_2\text{O}_3 \cdot \text{MnO})$  for  $n = 1, 3, 5, \text{ and } 10$ . In conclusion, it is stated that (1) the introduction of manganese oxides into  $\text{SrTiO}_3$  leads to the appearance of ionic relaxation polarization; (2) relaxation polarization also occurs in the system  $\text{Bi}_2\text{O}_3 \cdot n\text{MnO}$ , in which the relaxation of weakly bound electrons is possible in consequence of

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